

3-3

10 October 1960

Dear Kelly:

In accordance with your request at the Supplier's Meeting, we have given additional thought to the preflight preparations our system will require. We hope that the attached blueprint, summarizing the nature of and time for these activities, will permit you to propose an overall preflight countdown.

The range of times is an educated guess of the duration of each activity (after the first half dozen or dozen operations with this equipment). Whether we actually can accomplish the entire preflight in as little as 75 minutes will depend very much on the number of personnel available, the nature of facilities and equipment provided, and on system features not yet fully known. I think the 75 minutes represent an optimistic minimum, and it will only be achieved when the system is operating in a foolproof manner and the preflight operation is carried out under favorable conditions. The five hour estimate is probably a safe upper limit allowing for many adversities.

If you desire additional information, please let us know.

*Milt*  
Milt

MDR:mb

cc: Hqs-3  
EFM  
File

MB-M-129  
Cpy 4 of 6

ITEM	TIME (MINUTES)	CONCURRENT ITEMS
1. OBTAIN MISSION INFO & INSTRUCTIONS	1 - 15	
2. CLEAN SLITS & CAPPING SHUTTER	5 - 20	OBTAIN FILM
3. LOAD FILM	15 - 60	PREPARE PROGRAMMING DATA
4. INSTALL OR SERVICE HELIUM	5 - 20	PREPARE DATA CHAMBER
5. INSTALL DATA CHAMBER	1 - 5	AT VEHICLE: CLEAN HEADING REFERENCE CLEAN Q-BAY BORESIGHT HEADING REFERENCE & TIE-IN TO ISS PREPARE VEHICLE FOR SYSTEM TESTING (CAGERS, POWER, HOIST, ETC)
6. PROGRAM EXPOSURE & NOMINAL $\frac{1}{h}$	1 - 5	
7. CLEAN OPTICS (INCL. $\frac{1}{h}$ & HEADING SENSORS)	5 - 10	
8. BALANCE SYSTEM & ADJUST TRIM	10 - 40	
9. APPLY POWER & CHECK TEST POINTS	5 - 40	
LAB PREFLIGHT (ROUNDED SUB-TOTAL)	50 - 210	
10. MOVE TO VEHICLE	1 - 10	CLEAN WINDOWS & SERVICE HATCH
11. INSTALL SYSTEM	5 - 40	
12. VISUAL CHECKS (MOUNTING AND ELECTRICAL)	1 - 5	RECORD PREFLIGHT DATA
13. APPLY POWER THROUGH VEHICLE AND CHECK TEST POINTS	5 - 20	
14. TEST OPERATOR CONTROLS	5 - 10	
15. INSTALL HATCHES	5 - 15	
16. START Q-BAY PURGE WITH HELIUM	1 - 5	
VEHICLE PREFLIGHT (ROUNDED SUB-TOTAL)	25 - 90	
TOTAL PREFLIGHT (ROUNDED)	75 - 300	
17. DISCONNECT HELIUM	1 - 2	REMOVE HATCH COVERS

1-9 IN LAB  
 10-16 AT VEHICLE IN CLOSED AREA  
 17 AT RUNWAY